

PIPETTE CALIBRATION TREND ANALYSIS - ACCURACY % vs CALIBRATION

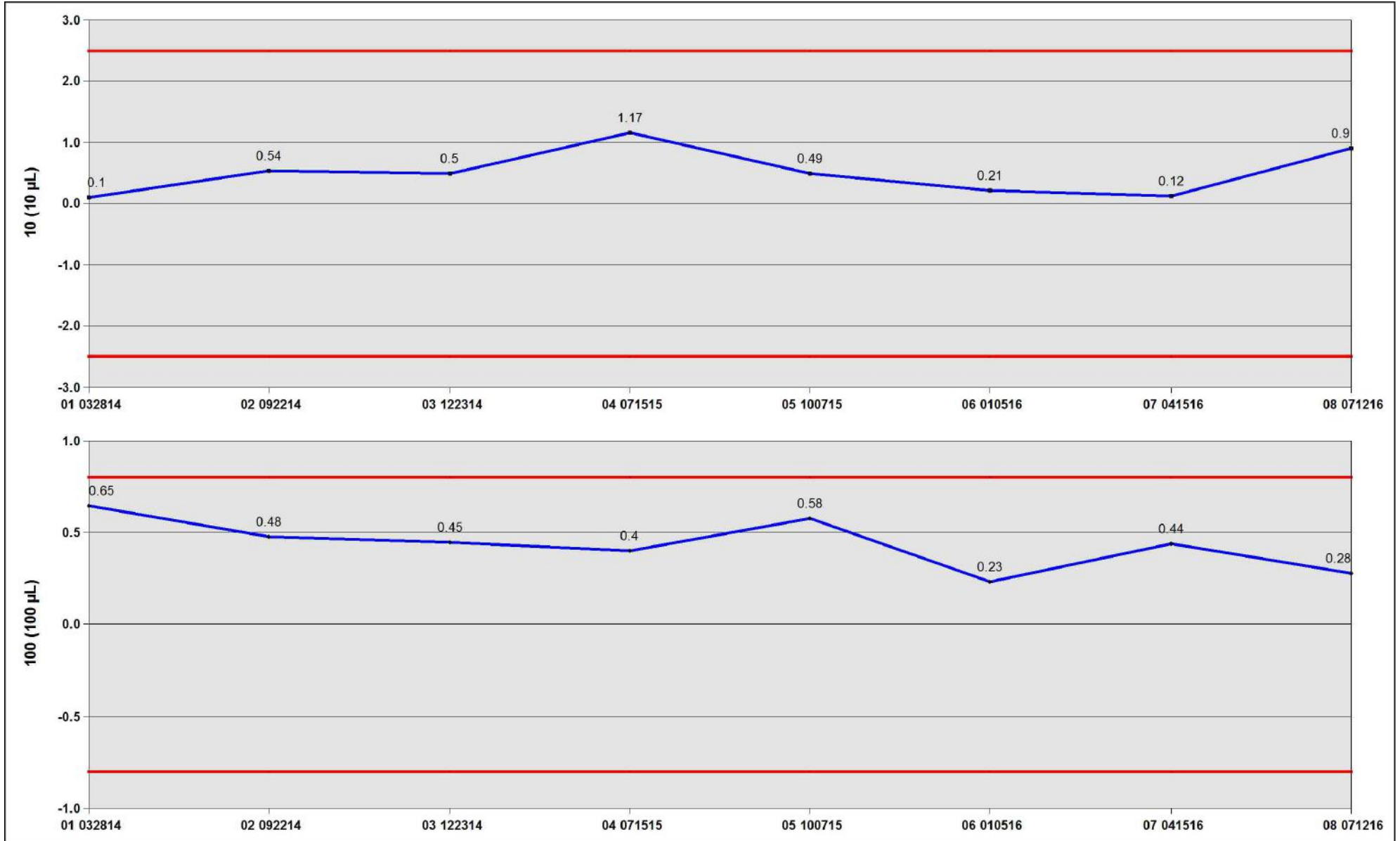
Date: 8/3/2016 Time: 2:19:04 PM
Device ID: 52-0124
Description: Single Channel
Method: 5-Samples, accuracy and precision LEVEL 5
Test Plan: Eppendorf 100ul lev 5 Novavax

Customer: Nnenna Nwokekeh (MP)
Contact: Nnenna Nwokekeh (MP)
Location: Novavax Inc.
Address: 9920 Belward Campus Dr.
Rockville, MD



Averaged Samples View

As Found



Signature: _____

Date: _____

Pipette Calibration Certificate



9693-C Gerwig Ln., Columbia MD 21046 800-451-9593 labpeople.com

Device Details

Device ID: Pipette-1
 Serial #: 14633752
 Description: Single Channel
 Model: Biohit Proline Plus 100, Variable, 100uL, 1ch
 Model Size: 100 uL
 Tip Name:
 Batch No.:
 Owner: The Lab People, Inc.
 Address: 9693-C Gerwig Lane
 Columbia, MD
 Contact: Andy Condon-Douglas
 Location: The Lab People, Inc.

Calibration Details

Method: 5 Samples, accuracy and precision LEVEL 4
 Test Plan: 100ul
 Calibrated by:

Certificate #: 77940

Environmental Factors

Temperature: 21.50 °C
 Atm. Pressure: 29.60 kPa Z Factor: 1.00243
 Relative Humidity: 55.00 % Air Density: 0.00035
 Liquid Density: 0.9979 Cubic 0.00000

Status

Calibration Date: 15-Sep-2016
 As Calibrated: Passed
 As Found: Passed
 Next Due: Sep-2017

Comment:

Measurement Standards

Device ID	Description	Serial Number	Last Calibration	Next Calibration
SECURA225D-1S	Pipette Calibration Balance	0032709396	26-Apr-2016	26-Oct-2016
05965	Barometer	05965	10-Mar-2016	10-Mar-2017
35519-049	Humidity/Temperature Pen	35519-049	12-Feb-2016	12-Feb-2018

Maintenance

- Battery Seal
 Ejector Shaft
 O-ring Tension Ring
 Piston Grease
 Preventive Maintenance

As Calibrated

Summary Statistics				Accuracy %		Precision %		Sample Volumes (µL)					
10.0 µL	Mean	SD	Unc. +/-	Actual	Target	Actual	Target	Status	1	2	3	4	5
Ch 1	9.9722	0.058	0.591	0.278	3.000	0.584	3.000	Passed	10.0243	9.9140	10.0042	10.0143	9.9040
50.0 µL	Mean	SD	Unc. +/-	Actual	Target	Actual	Target	Status	1	2	3	4	5
Ch 1	49.9049	0.214	0.620	0.190	3.000	0.429	3.000	Passed	50.0513	49.6403	50.0112	49.7105	50.1114
100.0 µL	Mean	SD	Unc. +/-	Actual	Target	Actual	Target	Status	1	2	3	4	5
Ch 1	100.1287	0.111	0.600	0.129	3.000	0.111	3.000	Passed	99.9723	100.2329	100.2329	100.0725	100.1327


As Found

Summary Statistics				Accuracy %		Precision %		Sample Volumes (µL)			
10.0 µL	Mean	SD	Unc. +/-	Actual	Target	Actual	Target	Status	1	2	3
Ch 1	10.2549	0.106	0.618	2.549	3.000	1.035	3.000	Passed	10.3751	10.2148	10.1747
100.0 µL	Mean	SD	Unc. +/-	Actual	Target	Actual	Target	Status	1	2	3
Ch 1	100.9747	0.148	0.620	0.975	3.000	0.146	3.000	Passed	101.1050	100.8143	101.0048

Expanded uncertainties, K=2 at 95% confidence level. Calibration performed under normal operating conditions. Any number of factors may cause the equipment to drift out of tolerance before the due date has expired.

Traceability:

Primary standards used for the calibration of equipment are traceable to the National Institute of Standards and Technology. The Scale People, Inc. meets requirements of ISO/IEC 17025. Calibration Procedures are performed in accordance with SOP 26 of our Standard Operating Procedure manual.

Calibrated by: Andy Condon-Douglas 15-Sep-2016 
 Reviewed by: _____



Device ID: Pipette-1
 Serial # 14633752